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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/879,995 | 06/14/2001 | Kazumasa Kokura | Q64944 | 4700 |

7590 09/14/2004

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
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Washington, DC 20037

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| EXAMINER |
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KEENAN, JAMES W

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| ART UNIT | PAPER NUMBER |
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3652

DATE MAILED: 09/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/879,995

Applicant(s)

KOKURA ET AL.

Examiner

James Keenan

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 1-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

1. Applicant's election without traverse of figures 34-39 and 42-47 is acknowledged. Claims 1-37 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species, there being no allowable generic or linking claim.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 39 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. There is no support in the specification that the species shown in figures 34-39 and 42-47 has a lift height detecting section such that lowering of the fork is prohibited upon detection of the fork height above a predetermined value.

Applicant's statement that a "forklift truck having an inclination detecting mechanism is well known in the art ..." is not understood. This has nothing to do with the subject matter of claim 39.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 38 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al, of record.

Anderson et al show a forklift truck having body 10 and forks 15 mounted for vertical movement along a mast 12 by a lift unit 14, wherein the inclination of the forks about pivot point 16, 16b is detected by sensor 18, 18b such that lowering movement of the forks is prohibited upon detection of fork inclination beyond a predetermined angle, such as upon encountering an obstruction.

The sensor of Anderson et al is either an electric or hydraulic switch rather than a magnet and corresponding magnet sensor. However, applicant admits on page 135 of the specification that the particular type of sensor is not critical to the invention, but rather that the magnetic sensor is only one of many types of sensors, including limit switches and proximity sensors, that could be used.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus of Anderson et al by substituting a magnet and magnet sensor in place of the electric or hydraulic limit switch, as the examiner takes Official Notice that this would be an art recognized functional equivalent means of sensing the relative positions of two elements, the selection of which would function equally as well in the apparatus of Anderson et al. As just one example, it is well known that an electro-magnetic proximity sensor is more reliable than an electro-mechanical "points" trigger in an internal combustion engine ignition system.

Re claim 41, a device to automatically bias the fork back to an acceptable angle such that the prohibition of the lowering movement would be canceled is considered an

obvious design expediency. Note that Anderson et al disclose that the lowering prohibition is canceled upon the operator correcting the condition which caused the prohibition of movement. It is noted that replacing manual activity with mechanical or automatic means to accomplish the same function has been shown to involve only routine skill in the art.

6. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al in view of Ryan, of record.

Anderson et al do not disclose stopping the forward or backward movement of the vehicle upon detection of fork inclination beyond the predetermined angle.

Ryan shows a similar lift truck lowering system wherein sensors determine if the lift carriage has encountered an obstacle during lowering thereof. If such an obstacle is detected, both lowering movement of the carriage as well as movement of the vehicle is prohibited.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus of Anderson et al by adding a vehicle stop section to prevent movement of the vehicle upon detection of fork inclination beyond the predetermined angle, as shown by Ryan, as this would simply be a well known safety expediency for use in the same environment in the event an obstacle is encountered during lowering of the lift forks.

7. Applicant's arguments with respect to claims 38 and 41 have been considered but are moot in view of the new ground(s) of rejection.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

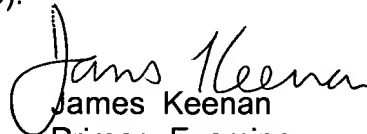
9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Keenan whose telephone number is 703-308-2559. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


James Keenan
Primary Examiner
Art Unit 3652

jwk
9/9/04